

AGU, I.A., gornyy inzh.; REVAZOV, M.A., gornyy inzh.

Strengthening a section of an open pit side with rods and piles.
Gor.zhur. no.10:19-22 0 '64. (MIRA 18:1)

1. Vsesoyuznyy nauchno-issledovatel'skiy marksheyderskiy institut,
Leningrad.

REVAZOV, M.I.

Improving the flowsheet of cement loading in bulk. TSement 24
no.4:25-26 J1-Ag '58. (MIRA 11:9)
(Cement)

REVAZOV, V.S. (Moskva, B. Savvinskiy per., d.7. dv.4).

Intracerebral pathway of the facial nerve in man during uterine development
Arkhnat., gist. 1 embr. 35 no.5:106-107 S-0 '58 (MIRA 11:12)

1. Kafedra normal'noy anatomii (zav. - deystvitel'nyy chlen AMN SSSR.
prof. V.N. Ternovskiy) 2-go Moskovskogo meditsinskogo instituta
imeni N.I. Pirogova.

(NERVES, FACIAL, embryology

intracerebral pathway in human fetuses (Rus))

BEVAZOV, V.S.

Czechoslovak morphological journal "Ceskoslovenska morfologie"
in 1963. Arkh. anat., gist. i embr. 48 no.5:105-109 My '65.
(MIRA 19:1)

1. Kafedra anatomii cheloveka (zav. - chlen-korrespondent AMN
SSSR prof. D.A. Zhdanov) 1-go Moskovskogo ordena Lenina meditsin-
skogo instituta imeni I.M. Sechenova. Submitted June 23, 1964.

REVAZOV, V.S.

Intracerebral relations between the facial and trigeminal nerve in
man. Zhur.nevr. i psikh. Supplement:34-35 '57. (MIRA 11:1)

1. Kafedra anatomii (zav. - prof. V.N.Ternovskiy) II Moskovskogo
meditsinskogo instituta.
(NERVES, FACIAL)

REVAZOV, V.S. (Moskva, Novodevichiy proyezd, 2, kv.83)

Czechoslovakian morphological journal "Ceskoslovenska morfologie"
for 1962. Arkh. anat., gist. i embr. 45 no.12:69-73 D '63.
(MIRA 17:8)

1. Kafedra anatomii cheloveka (zav. - chlen-korrespondent
AMN SSSR prof. D.A. Zhdanov) 1-go Moskovskogo ordena Lenina
meditsinskogo instituta imeni Sechenova.

REVAZOV, V.S.

Czechoslovak morphological journal "Ceskoslovenska Morfologie", 1960.
Reviewed by V.S.Revasov. Arkh. anat., gist. i embr. 42 no.3:121-124
Mr '62. (MIRA 15:5)

1. Kafedra anatomii cheloveka (zav. - chlen-korrespondent AMN SSSR prof.
D.A.Zhdanov) I Moskovskogo ordena Lenina meditsinskogo instituta imeni
I.M.Sechenova. Adres avtora: Moskva, Mokhovaya 11, korpus teoreticheskikh
kafedr I Moskovskogo ordena Lenina meditsinskogo instituta.
(CZECHOSLOVAKIA--MORPHOLOGY--PERIODICALS)

TSEYTLIN, Kh.L.; STRUNKIN, V.A.; REVAZOV, Ye.K.

Effect of cathodic polarization on the stability of tantalum
in hydrochloric acid. Zhur.prikl.khim. 33 no.2:345-348
F '60. (MIRA 13:5)

1. Institut organicheskikh poluproduktov i krasiteley imeni
K.Ye.Voroshilova.
(Tantalum) (Polarization(Electricity))

REVAY, T.

REVAY, T. Remarks on Sandor Szabo's article "The New Hungarian Camera", also,
remarks by S. Szabo. p. 26.

No. 22, Nov. 1955.

MUSZAI ELET.

TECHNICGY

Budapest, Hungary

So: East European Accession, Vol. 5, No. 5, May 1956

Yellow acetone and sylvan oils as motor fuel. (A preliminary report.) A. N. Revazov. *Lesokhim. Prom.* 1940, No. 1, 53-4; *Khim. Prom. Zhur.* 1940, No. 6, 110; *cf. C. A.* 34, 2164. —Rectification of yellow acetone oils gives 90% of a product of d. 0.882, b. 68-138°, 60% distg. off up to 100°, octane no. 95, having properties similar to those of first-grade gasoline. Sylvan oils treated similarly produce fractions which are similar to aviation gasolines (d. 0.815, b. 60-122°, 80% distg. up to 100°, octane no. above 90). Both products have an acidity of 0.01.

21

new solvents from waste products [of wood distilla-
tion]. A. N. Mayanov. *Lavobim. Prom.* 1938, No. 5,
33-4; *Khim. Refert. Zhur.* 2, No. 4, 121-2(1939).--
The waste products of the rectification of crude CH_3OH
are distl. with water (1:1) and rectified. The fraction
boiling up to 80° (40-50% of the charge) is treated with
alkali and rectified. The solvent "M" boils between 70
and 77° and its yield is 30-35% of the initial crude mate-
rial. It is clear, colorless, sp. gr. 0.841, soly. in water.
54% for 1:1 and 85% for 1:4, content of ketones (calcd.
to acetone) 41.7%, acidity 0.019% (calcd. to $HCOOH$)
and 95% of the solvent boils at 69-81°. Solvent "M"
can also be obtained from the floating alc. oils.

W. R. Henn

TSEYTLIN, Kh.L.; REVAZOV, Ye.K.; STRUNKIN, V.A.

Effect of the cathodic polarization of tantalum on its electric conductivity. Zhur.prikl.khim. 33 no.4:850-854 Ap '60. (MIRA 13:9)

1. Institut organicheskikh poluproduktov i krasiteley imeni K.Ye. Voroshilova.

(Tantalum--Electric properties)

S/080/60/033/04/17/045

AUTHORS: Tseytlin, Kh.L., Revazov, Ye.K., Strunkin, V.A.

TITLE: The Effect of Cathode Polarization of Tantalum on Its Electroconductivity ²¹

PERIODICAL: Zhurnal prikladnoy khimii, 1960, Vol 33, Nr 4, pp 850 - 854

TEXT: Cathode polarization of tantalum in hydrochloric acid is accompanied by hydrogenation of the metal and leads to its cracking. In the experiments tantalum plates (with about 1% of niobium), 1 mm thick and 90 mm long and with a surface of 30 - 35 cm², were used as cathode. A graphite rod served as anode. The measurements were carried out in an oil bath and lasted 5 - 10 minutes. Under the conditions studied the electric resistance of tantalum in the case of cathode polarization increases in direct proportion to the quantity of hydrogen absorbed. With an increase in the duration of the cathode polarization of tantalum and the current density from 0.1 to 10 A/m², the amount of hydrogen absorbed by tantalum increases and consequently also its electroresistance. With an increase in the thickness of tantalum from 1 to 5 mm the time needed for the saturation with hydrogen increases considerably, and so does correspondingly the electroresistance. Cracking of tantalum starts during cathode polarization, if its

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S/080/60/033/04/17/045

The Effect of Cathode Polarization of Tantalum on Its Electroconductivity

specific electric resistance increases by 25 - 40% at 20°C and by 90 - 110% at 60°C relative to the initial value.

There are: 2 diagrams, 3 graphs and 8 references, 6 of which are Soviet and 2 German.

ASSOCIATION: Institut organicheskikh poluproduktov i krasiteley imeni K.Ye. Voroshilova
(Institute of Organic Semi-Finished Products and Dyestuffs imeni K.Ye. Voroshilov)

SUBMITTED: April 22, 1959

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18.8000

77639

SOV/80-33-2-14/52

AUTHORS: Zeytlin, Kh. L., Strankin, V. A., Revazov, Ye. K.

TITLE: Effect of Cathodic Polarization Upon Stability of Tantalum in Hydrochloric Acid

PERIODICAL: Zhurnal prikladnoy khimii, 1960, Vol 33, Nr 2, pp 345-348 (USSR)

ABSTRACT: The authors studied the effect of temperature and current density upon degree of disintegration of tantalum metal which takes place when negative potential is applied to the latter. Negative potential was created in tantalum by: (1) - connecting tantalum plates (thickness 1 mm and area cm^2) with the negative pole of a current source, as shown in Fig. 1:

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Effect of Cathodic Polarization Upon
Stability of Tantalum in Hydrochloric Acid

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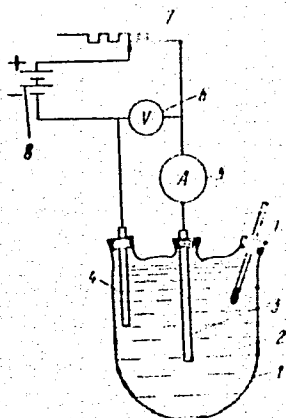


Fig. 1. Diagram for application of negative potential to tantalum: (1) 0.75 l flask; (2) 20% HCl; (3) graphite anode; (4) tantalum sample; (5) milliammeter; (6) voltmeter; (7) variable resistance; (8) source of direct current; (9) thermometer. Anode-cathode distance = 2.5 cm.

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and, (2) - by contacting (through an elastic rubber ring or a metal conductor) the tantalum plates with a steel bar (diameter 15 mm, length 150 mm), both immersed in 20% HCl. Duration of experiments (performed at 20 and 60°) was determined by appearance of fissures on the sample. Fig. 2 shows the results of this study.

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Stability of Tantalum in Hydrochloric Acid

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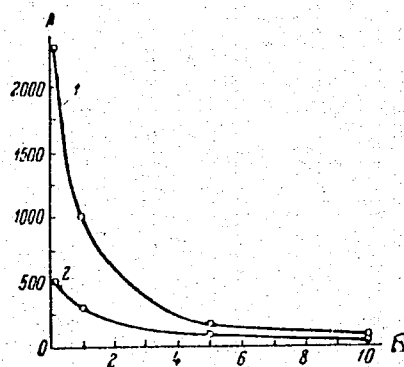


Fig. 2. Tendency of tantalum to crack as a function of current density at temperature 20° (1) and 60° (2): A - time to the moment of cracking (in hours); B - cathode current density (in amp/m²).

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Effect of Cathodic Polarization Upon
Stability of Tantalum in Hydrochloric Acid

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SOV/80-33-2-14/52

Behavior of tantalum in electrolysis of HCl is similar to behavior of steel during cathodic polarization [Karpenko, G. V., Kripyakevich, R. I., Doklady Akad. Nauk SSSR, 120, 4, 827 (1958)]. Rise of temperature speeds up the cracking process by speeding up diffusion of atomic hydrogen and its combination into molecules in the body of the metal. In the experiment designed to investigate the action of molecular hydrogen, the tantalum plate, placed into a filter funnel with HCl, was continuously washed with molecular hydrogen (obtained in electrolysis of 30% KOH) which entered the funnel through the filter. No changes were noted in appearance of tantalum. There are 3 figures; 1 table; and 9 references, 7 Soviet, 1 German, 1 U.K. The U.K. reference is: Metal. Ind., 66, 25-26, 406 (1945).

ASSOCIATION: K. Ye. Voroshilov Institute of Organic Intermediates
and Dyes (Institut organicheskikh poluproduktov i
SUBMITTED: krasiteley imeni K. Ye. Voroshilova)
February 2, 1959 Card 5/5

USSR / Human and Animal Pathology. Nervous System. S-2
Central Nervous System.

Abs Jour: Ref Zhur-Biol., No 14, 1958, 64741.

Author : ~~Revasov, V. S.~~

Inst : Moscow Medical Institute.

Title : Anatomy of the Superior Olivary Body in Man, and
its Interrelationship with Surrounding Formations
of the Pons Varioli.

Orig Pub: Uch. zap. 2-Y Mosk. Med. in-t, 1957, 4, 31-34.

Abstract: In 15 examples of the trunk portion of the human
brain, by a laboratory method, it was demonstrated
that the superior olivary body (SOB) is located
in the rear section of the pons varioli, on the
border between the base and the cap. By its rear
terminus SOB reaches the level of the border of
the pons with the medulla oblongata. On the inner

Card 1/2

REVAZOV, V.S. (Moskva, Novodevichiy proyezd, d.2, kv.83)

Czechoslovak morphology journal, "Ceskoslovenska morfologie", for
1961. Arkh.anat., gist i embr. 43 no.7:111-114 J1 '62.

(MIRA 15:9)

1. Kafedra anatomii cheloveka (zav. - chlen-korrespondent AMN
SSSR prof. D.A.Zhdanov) I Moskovskogo ordena Lenina meditsinskogo
instituta imeni I.M.Sechenova.

(CZECHOSLOVAKIA--MORPHOLOGY--PERIODICALS)

CVIA 17, 1. . .

Dissertation: "Regenerative Anatomy of the Intracerebral Part of the Facial Nerve of Man." Conf Med Sci, Second Moscow Medical Inst imeni I. V. Stalin, 21 May 54.
Meditsinskiy Rabotnik, Moscow, 21 May 54.

SO: SUM 284, 26 Nov 1954

REVAZYAN, A.A.

MASHOVETS, V.P.; REVAZYAN, A.A.

E. m. f. of certain galvanic circuits in cryolite and alumina
fusions. Zhur.prikl.khim. 30 no.7:1006-1012 J1 '57. (MIRA 10:10)

1.Vsesoyuznyy alyuminiyevo-magniyevyy institut.
(Cryolite) (Alumina)

REVAZYAN, A. A.

Kinetics of the process of aluminum loss in cryolite-alumina
melts. TSvet. met 33 no.8:51-56 Ag '60. (MIRA 13:8)
(Aluminum--Electrometallurgy)

13.5100

77725

SOV/149-60-1-14/27

AUTHOR: Revazyan, A. A.

TITLE: Secondary Reactions and Composition of Anode Gases
in Aluminum Electrolyzers

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy. Tsvetnaya
metallurgiya, 1960, Nr 1, pp 101-107 (USSR)

ABSTRACT: This article is a study of CO_2 contained in anode
gases in interaction with aluminum dissolved in
the fused electrolyte, as well as with anode carbon
and carbon foam. CO_2 interaction with dissolved
aluminum of the electrolyte. One of the reasons
for an incomplete utilization of the current is a
reversed reaction between the dissolved metal and
the anode gases. Whether the formation of metal is of
a chemical nature or is due to a partial discharge
of trivalent Al to monovalent, the final results are
the same and involving the loss of 6 faradays per

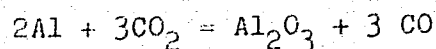
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Secondary Reactions and Composition of
Anode Gases in Aluminum Electrolyzers

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g/mol Al_2O_3 :



Knowing the metal yield with reference to current (η), it is easy to determine the CO quantity formed in the reaction. Assuming that CO_2 alone is formed at the anode as primary gas, one faraday will produce 5.6 liters of CO_2 . The total gas quantity after the reaction will also be $V_{CO_2} + V_{CO} = 5.6$ liters.

The portion of CO in it is determined from the equation:

$$C_{CO} = \frac{V_{CO}}{V_{CO_2} + V_{CO}} 100 \quad C_{CO} = 2(1 - \eta) 100. \quad (1)$$

from which it follows that:

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$$C_{CO_2} = 100 - C_{CO}$$

$$C_{CO_2} = (2\eta - 1)100. \quad (2)$$

From the above it may be concluded that a 100% metal yield will be accompanied by a 100% CO_2 yield. However, as the metal yield is 85-87% rather than 100%, the quantity of CO_2 will be in accordance with Eq. (2), i.e., $C_{CO_2} = 70\%$ and $C_{CO} = 30\%$, while the total CO formed in the reactions amounts to:



$$C_{CO}^* = C_{CO}^{Al} + C_{CO}^C.$$

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By substitutions the author derives the final expression:

$$C_{CO}^{Al} = C_{CO_2}^* \frac{2(1-\eta)}{2\eta-1} \quad (5)$$

$$C_{CO}^* = C_{CO}^{Al} - C_{CO_2}^* \frac{2(1-\eta)}{2\eta-1} \quad (6)$$

which amounts to 86.51% CO₂ and 13.49% CO--proving that about 2/3 of the total CO in final gas is formed by the reaction of the dissolved metal with carbon dioxide formed at the anode. The general consumption of anode carbon is higher by 6.74% than the theoretical. CO₂ interaction with polarized anode. Contrary to opinions prevailing in literature, the author states that secondary processes cannot attack the carbon of the anode for the very reason that it is an anode whose interface with the fused electrolyte is positively charged--meaning that carbon atoms at the

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Secondary Reactions and Composition of
Anode Gases in Aluminum Electrolyzers

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surface are lacking valent electrons which would effectuate the bonding with oxygen or CO_2 . This excludes another reaction of a primary product with the material of the anode. The operation of titanium electrolyzers and the content of their anode gases confirm this premise: Anode gases of titanium electrolyzers contain 66-73% oxygen and only 1.5% CO_2 , although the anodes are of carbon. CO_2 interaction with carbon suspended in electrolyte. Until recently, there was no answer to this problem. The author undertook tests with fused electrolytes to which he deliberately added pulverized graphite, analyzing the anode gas content before and after this addition. The former consisted of 99.07% CO_2 ; the latter contained an average of 21.32% CO_2 and 78.68% CO , proving that there is a reaction between CO_2 of the anode gases and the carbon suspended in the bath formed by the material crumbling

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Secondary Reactions and Composition of
Anode Gases in Aluminum Electrolyzers

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from the anode. The article was recommended by the
Chair of Metal Technology and Physical Metallurgy
of the Erevan' Polytechnic Institute. (Kafedra
tekhnologii metallov i metallovedeniya Erevanskogo
politekhnikheskogo instituta). There are 4 tables;
and 5 references, 1 Soviet, 3 Italian, 1 U.S. The U.S.
reference is: Pearson, Waddington, J. Disc. Faraday
Soc, 7, 307.

ASSOCIATION: All-Union Scientific Research Institute for Magnesium
and Aluminum. Electro-metallurgical Laboratory
(Vsesoyuznyy nauchno-issledovatel'skiy alyuminievo-
magnievyy institut. Elektrometallurgicheskaya labora-
toriya)

SUBMITTED: April 29, 1959

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REVAZIAN, A.A.
CARD 13/34

5(4) PHASE I BOOK EXPLOITATION SOV/2216

Sovetskaniye po elektrokimii. 4th, Moscow, 1956.

Trudy...i [laborniki] (Transactions of the Fourth Conference on Electrochemistry: Collection of Articles) Moscow, Izd-vo AN SSSR, 1959. 868 p. Errata slip inserted. 2,500 copies printed. Sponsoring Agency: Akademiya nauk SSSR. Otdeleniye khimicheskikh nauk.

Editorial Board: A.N. Prumkin (Resp. Ed.) Academician, O.A. Yesin, Professor, S.I. Zhdanov (Resp. Secretary) B.N. Kabanov, Professor, Ya. M. Kolotyrkin, Doctor of Chemical Sciences, V.V. Iosad, P.D. Lukovtsev, Professor, Z.N. Solov'yeva, V.V. Stender, Professor, and G.M. Porfirovich; Ed. of Publishing House: N.G. Yegorov; Tech. Ed.: I.A. Prusakova.

PURPOSE: This book is intended for chemical and electrical engineers, physicists, metallurgists and researchers interested in various aspects of electrochemistry.

COVERAGE: The book contains 127 of the 138 reports presented at the Fourth Conference on Electrochemistry sponsored by the Department of Chemical Sciences and the Institute of Physical Chemistry, Academy of Sciences, USSR. The collection pertains to different branches of electrochemical kinetics, double layer theories and galvanic processes in metal electrodeposition and industrial electrolysis. Abridged discussions are given at the end of each division. The majority of reports not included here have been published in periodical literature. No personalities are mentioned. References are given at the end of most of the articles.

Pomenko, A.S., T.M. Abramova and I.L. Gankina (Institut fizicheskoy khimii AN USSR-Institute of Physical Chemistry AS USSR). Mechanism of the Corrosion of Iron, Magnesium, Zinc and Aluminum With the Aid of Heavy Oxygen Isotopes 299

Discussion [A.M. Glazberg, A.P. Tomilov, P.D. Lukovtsev, O.A. Todoradze and contributing authors] 302

PART IV. ELECTRODE PROCESSES IN PUSIONS 309

Yesin, O.A. (Ural'skiy politekhnicheskii institut-Ural Polytechnic Institute). Electrode Processes in Pused Oxides 311

Montelli, R., G. Sternheim, M. Francini, and G. Montanelli (Italy). Investigation of Overvoltage Phenomena in Pused Salts 323

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Bayakov, Yu. V., and N.S. Nikitenko (Leningradskiy politekhnicheskii institut imeni M.I. Kalinina-Leningrad Polytechnic Institute imeni M.I. Kalinin). Investigating Ion Exchange Between a Pused Metal and Its Salt With the Aid of Radioactive Isotopes 329

Mazhovets, V.P., and A.A. Revazyan (Vsesoyuznyy alyuminiyevomagnitnyy institut-Aluminum-Magnesium Institute). Mechanism of Anode Discharge During the Electrolysis of Molten Cryolite Clay 334

Rempel, S.I., L.P. Khodak, and N.A. Anishava (Ural'skiy politekhnicheskii institut-Ural Institute of Forest Technology). Mechanism of the Interaction Between Oxygen and a Carbon Anode in Molten Cryolite Clays 342

Antipin, L.N. (Ural Polytechnic Institute). Role of Metal-Pused-Salt Equilibrium in Electrode Processes 345

Card 14/34

REVAZIAN, A. A.

"Investigation of the Anode Process in the Electrolysis of Cryolite - Argillaceous Earth Fuse Masses." Cond Tech Sci, All-Union Aluminum and Magnesium Inst, Leningrad, 1954. (RZhKhim, No 17, Sep 54)

SO: Sum 432, 29 Mar 55

AT 142 VAN, A.A.

SOV/137-58-8-16635

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 8, p 55 (USSR)

AUTHORS: Mashovets, V.P., Revazyan, A.A.

TITLE: An Investigation of the Anode Process in Electrolysis of an Alumina-Cryolite Melt (Issledovaniye anodnogo protsessa pri elektrolize kriolito-glinozemnogo rasplava)

PERIODICAL: Tr. Vses. alyumin.-magn. in-ta, 1957, Nr 39, pp 288-306

ABSTRACT: Calculation of the relative content of various cations and anions in a melt containing 90 weight % of cryolite and 10 weight % of alumina shows fluorine-containing ions predominate over oxygen-containing (if the ion contents be expressed in percentage of the total number of ions of the given sign, and if it be assumed that the cryolite and alumina have undergone complete dissociation in accordance with the six most probable equations). If it be taken that the mean alumina contents of the melt are <10 weight %, and if incomplete dissociation of the alumina be assumed, this predominance is even greater. Therefore, current is carried to the anode primarily by the fluorine-containing anions. The anode discharge, however, is effected by oxygen-bearing anions. As applied to electrolysis of a

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SOV/137-58-8-16635

An Investigation of the Anode Process in Electrolysis (cont.)

cryolite-alumina melt, the emf of the $\text{Al}|\text{Na}_3\text{AlF}_6, \text{Al}_2\text{O}_3|\text{O}_2(\text{Pt})$ and $\text{Al}|\text{Na}_3\text{AlF}_6, \text{Al}_2\text{O}_3|\text{CO}_2(\text{C})$ circuits should correspond to the free energy of the reactions $4\text{Al} + 3\text{O}_2 \rightarrow 2\text{Al}_2\text{O}_3$ (1) and $4\text{Al} + 3\text{CO}_2 \rightarrow 2\text{Al}_2\text{O}_3 + 3\text{C}$ (2) under the condition that O_2 and CO_2 , respectively, serve as the cathode current-forming substances in these circuits. To verify this last hypothesis, the emf of a series of galvanic circuits in molten cryolite saturated with alumina was measured by a compensation method at 1010-1060°C. In the first circuit, a constant 2.12-v emf was established immediately, and this corresponded to the free energy of reaction (1). This means that O_2 is the active electromotive substance in the cathode. The stable emf of a circuit with a (CO_2 , Pt) electrode was reduced by 1.004 v as compared with the emf of a circuit with an (O_2 , Pt) electrode, and this is in virtually exact agreement with the free energy of the $\text{C} + \text{O}_2 = \text{CO}_2$ reaction. Measurement of the emf of currents with carbon dioxide cathode compels us to regard the theoretical voltage of decomposition of alumina with a carbon anode to be 1.115 v, and the higher values obtained experimentally to be ascribed to overvoltage. This value for decomposition voltage, which is in good agreement with the thermodynamic value for decomposition voltage, is confirmed by extrapolation of the I-V curves. 1. Electrolysis--Analysis 2. Anodes--Performance
Card 2/2 I.G.

BEVAZYAN, A.A.

Electromotive forces of galvanic cells of fused cryolite-alumina. V. P. Maslovets and A. A. Bevazyan. *Zhur. Priklad. Khim.* 30, 1006-12 (1957). The e.m.f. of cells $\text{Al} \parallel \text{Na}_2\text{AlF}_6 + \text{Al}_2\text{O}_3 \parallel \text{gas electrode}$ were measd. at 1000-1500°C; the gas electrodes were: Pt(O) and Pt(O,N) (I), Pt(CO₂) (II), C(CO₂) (III), and C(O) (IV). The electrolytic cells consisted of 2 concentric porous sintered-corundum cylinders inside a graphite crucible. The inside cylinder protected the gas electrode from possible "metallic fog". The Mo wire connecting the Al electrode and the C gas electrodes (hollow C tubes) were protected by corundum sleeves and so was the Pt electrode with the gas flowing through the tube. Synthetic cryolite ($\text{NaF}:\text{AlF}_3 = 3$) was sattd. with Al_2O_3 . The theoretical e.m.f. of I (2.12 v.), calcd. from the free energy of the reaction $\text{Al}_2\text{O}_3 \rightarrow 2\text{Al} + 1.5 \text{O}_2$, indicated that the reaction was reversible. The exptl. e.m.f. of a gas, contg. 12.9% O and 87.1% N was 2.00-2.04, and that of a gas contg. 3.5% O and 96.5% N was 1.84-1.83 v. The O electrode approached reversibility at $\text{O}_2 = 1 \text{ atm.}$ so that the process was more accurately represented by $\text{Al} \rightarrow \text{Al}^{+++} + 3e$ on the anode and $\text{O}_2 + 4e \rightarrow 2\text{O}^{--}$ or $\text{O}_2 + 2\text{Al}_2\text{O}_3 + 4e \rightarrow 4\text{AlO}_2^-$ (depending on the character of the O-contg. anion) on the cathode and $2\text{Al}^{+++} + 3\text{O}^{--} \rightleftharpoons \text{Al}_2\text{O}_3$ or $\text{Al}^{+++} + 3\text{AlO}_2^- \rightleftharpoons 2\text{Al}_2\text{O}_3$ in the liquid phase. The e.m.f. of II was equal to the theoretical value, 1.10-1.12 v., and the process was represented by $\text{CO}_2 + 4e \rightarrow \text{C} + 2\text{O}^{--}$ or $\text{CO}_2 + 2\text{Al}_2\text{O}_3 + 4e \rightarrow \text{C} + 4\text{AlO}_2^-$. The e.m.f. of III decreased with time from 1.346-1.40 v. during the first 5 min. to 1.11 v. after 30 min. and remained const. at this value till the end of the expt. (120 min.). The C electrode had not been treated in any way except that it was held over the

MASHOVETS, V. P.; REVAZYAN, A. A.

melt for 15-20 min. before submerging. In 1 expt. the CO_2 was stopped after the const. e.m.f. (1.11 v.) was reached, and the e.m.f. decreased to 0.74 v. In another expt. the C electrode was removed and kept in the air a few min. and then submerged; the initial e.m.f. was 1.35-1.45 v. A similar decrease of the e.m.f. with time was exhibited by electrode IV. These results indicated that CO_2 was the controlling factor and that an intermediate gas C_2O was formed.

I. Benicowitz

2/2

DM of

REVAZYAN, G.

New electric devices. Prom. Arm. 6 no. 9:44-46 S '63. (MIRA 16:12)

1. Glavnyy konstruktor Yerevanskogo elektroapparatnogo zavoda.

REVCHUK, Z.

Readers' conference in Vinnitsa. Med. sestra 21 no.3:61
Mr '62. (MIRA 15:3)
(NURSES AND NURSING—PERIODICALS)

10

Processes and Properties Index

The control of the quality of basic open-hearth slags.
V. P. Revel'sov and I. G. Lukavchenko. *Ural. Met.*
1939, No. 3, 9-16; *Khim. Referat. Zhur.* 1939, No. 9,
68-9. The fluidity of open-hearth slags in relation to
basicities, contents of CaO , and the effect of oxidation,
and the effect of the fluidity on the dephosphoration and
on the desulfuration of the metal were investigated.
The basicity of slags can be increased without increased
viscosity by addns. of 1-1.5% bauxite. The following
compos. of the slags for melting low-C steel are recom-
mended: (1) for bauxite slags $\text{CaO}:\text{SiO}_2 = 2.2-2.6$, FeO
not over 10-12%, MnO not less than 10% and Al_2O_3 in
the 5-7% limits; (2) for lime slags $\text{CaO}:\text{SiO}_2 = 2.0-2.4$,
 FeO not over 12% and MnO not less than 12%.

W. R. Hemm

The quality of charcoal pig iron and of coke pig iron. V. P. Revbensky and L. S. Rybakov. *Ural. Met. No. 8, No. 1, 15-27 (1930)*; *Chem. Zvest. 1930, II, 3742-3*. — In comparative tests on pig iron smelted with charcoal and that smelted with metallurgical coke it was found that the 2 pig irons did not differ as to their content in the rarer elements, since Ni, Co, W and Mo are not present in crude iron and Cr, Ti, Cu and V are present only in traces. The coke pig iron was oxidized to a greater degree than the charcoal pig iron. Thus the former contained 0.138% FeO while the latter contained only 0.0046%. The FeO content of the charcoal pig iron was somewhat higher with forced operation of the furnace than otherwise, although the difference was of no practical significance. There were essential differences in the N content. The coke pig iron showed an av. N content of 0.0042%; the N content of the charcoal iron was 0.0041% with forced furnace operation and 0.0031% without forced operation. The coke pig iron possessed a higher content in nonmetallic inclusions (0.338%) than the charcoal iron (0.042%). The higher content in these impurities is due to the presence of inclusions of CaO, SiO₂, FeO and MnO. The amt. of non-metallic inclusions in the charcoal iron was not essentially increased by forced operation of the furnace.

M. G. Moore

COMMON ELEMENTS																										COMMON ELEMENTS																									
COMMON ELEMENTS																										COMMON ELEMENTS																									
PROCESSES AND PROPERTIES INDEX The influence of the quality of the crude iron on the quality of the steel. V. P. Marchukov and L. S. Rybnikov. <i>Ural. Met. S.</i> No. 9, 11-19(1939); <i>Chem. Zentr.</i> 1940, 1, 3164; cf. <i>C. A.</i> 35, 50731. — A direct relationship exists between the gas content (N_2) of the crude iron and that of the open-hearth steel. The same is true of the degree of contamination with nonmetallic inclusions (SiO_2 and Al_2O_3). This is not true, however, of the FeO content of the crude iron and of the steel. The superior quality of crude iron smelted with charcoal, therefore, is imparted to the Martin steel produced from it, so that the latter has a correspondingly higher viscosity and lower content in SiO_2 and Al_2O_3. The simpler the subsequent treatment of the steel and the less rigorous the demands made of it the less important is the quality of the crude iron used. Thus, e. g., in the production of sheet metal for automobiles crude iron smelted with coke can be used and still give a product having satisfactory properties. M. G. Moore																																																			
ASB-SLA METALLURGICAL LITERATURE CLASSIFICATION																																																			
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METALLURGICAL LITERATURE CLASSIFICATION																									
MATERIAL INDEX													PROPERTY INDEX												
CROSS ELEMENTS													AND OTHER INDEXES												
CA													The effect of titanium on the quality of medium-carbon steel. V. P. Revtsov and P. A. Cherkasov. <i>Ural. M.</i> 8, No. 12, 80-8 (1969); <i>Chem. Zentr.</i> 1969, 11, 1203. Expts. on deoxidizing steel with Fe-Ti confirm the observations of Mes'kin and Margolin (C. A. 30, 7932*) that a Ti content of 0.05% has a beneficial effect on steel. R. and C. found that a Ti content of not more than 0.16% effects a fine-grained structure. This is attributed to the formation of heat-resistant Ti oxides, which counteract the growth of austenitic grains. In the presence of Ti local liquation, distribution of pipes over the entire ingot, the gas content (especially N), and slag inclusions are inhibited; the tensile strength, resistance to wear, hardness and yield point are raised. The usable portion of the ingot is greatest with a content of 0.1-0.2% of Ti. M. Hosh												

Comparative investigation of the quality of castings of metal cast killed and unkilld. A. P. Ryevichov and D. P. Strugovshchikov. *Ural. M. P.*, No. 1, 7, 22 (1941); *Chem. Zentr.* 1940, II, 2535-6. —Tests were made on a killed-steel casting contg. C 0.09-0.1, Mn 0.43-0.44, Ti 0.005, Si trace and S and P 0.01-0.02% and on a steel cast unkilld contg. C 0.08-0.1, Mn 0.41-0.47, and S and P 0.01-0.03%. The casting from the killed steel showed practically the same content in nonmetallic inclusions with an essentially uniform distribution throughout the casting. Also, the distribution of C, Mn, P and S segregations was more uniform in this steel so that it was less vigorously attacked when etched by acids. In the case of the casting from the unkilld steel the middle portion with a higher content in segregations was especially vigorously attacked. Steel killed with Al and ferrotitanium showed least segregation (20-40%) with the most uniform distribution of the segregations and was least attacked by acids. The properties of the steel were not essentially affected by the addn. of 0.006-0.008% of Ti. As compared to steel cast in the unkilld condition, the grain structure was finer and the impact resistance and tensile strength were higher. M. G. Moore.

M. G. Moore

REVEBTsov, V. P.

✓ Quality of charcoal and coke pig iron used in smelting
high-grade converter pig iron. V. P. Revebtsov. *Trudy*
Ural. Polytekhn. Inst. im. S. M. Kirova 52, 121-16 (1955).
The content of N and H and the proportion of nonmetal
inclusions are not affected by the nature of the fuel, wood
charcoal, or coke. The H content is increased by the pro-
portion of moisture in the blast. Inclusions are affected
by the quality of the ore and by the ash in the fuel. Wood
charcoal is not recommended for high-grade steels. I. B.

137-1958-3-4727

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 3, p 37 (USSR)

AUTHOR: Revebtsov, V. P.

TITLE: A comparison of Methods for the Determination of Furnace-Crew Shift Productivity in Steel Smelting Shops Operating on a Schedule (Sravnitel'naya otsenka metodov opredeleniya smennoy proizvoditel'nosti pechnykh brigad pri rabote staleplavil'nykh tsekhov po grafiku)

PERIODICAL: Tr. Ural'skogo politekhn. in-ta, 1957, collection 66, pp 78-85

ABSTRACT: Existing methods for determining the productivity of shifts by means of a grade scale or by the actual amount of time consumed during smelting do not stimulate the work of furnace crews which operate on a schedule. Moreover, the second method results in wage equalization. More progressive is the method of evaluating the productivity of shifts by means of the time norms of the operational schedule; this method clearly reveals the leading and the lagging crews. It also stimulates material interest of the workers in the creation of rhythmic operation of the steel smelting shops.

G. S.

Card 1/1

137-1958-3-4723

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 3, p 36 (USSR)

AUTHORS: Revebtsov, V. P., Valuyev, A. I.

TITLE: The Practice of Operational Computation of Production Costs at Ferrous Metallurgy Plants (Opyt operativnogo kal'kulirovaniya sebestoimosti produktsii na predpriyatiyakh chernoy metallurgii)

PERIODICAL: Tr. Ural'skogo politekhn. in-ta, 1957, Nr 66, pp 121-132

ABSTRACT: A description of methods and results of introducing a system of daily computation of production costs at the Kuznetskiy combine, and at the Novo-Tagil'skiy metallurgical plant. Forms employed for accounting and computation documents are shown.

A. D.

Card 1/1

REVEBTSOV, V.P.; LEDNEV, M.P.; SHILOV, V.I.; OSMINKIN, A.A.; LUPEYKO, V.M.;
KOPIZYAKOVA, M.V.

Investigating the quality of carbon steels made from pig irons
containing boron. Izv.Sib.otd.AN SSSR no.11:49-58.
(MIRA 12:2)

1. Ural'skiy filial AN SSSR.
(Steel)

REVEBTSOV, V. P.

Bardin, I.P., V.A. Reznichenko, G.D. Sidorenko, V.P. Revebtsov, and V.M. Lutseyko (Institute of Metallurgy, Academy of Sciences USSR, and Institut metallurgii UFAN (Institute of Metallurgy, Urals Branch, Academy of Sciences USSR). Results of Consolidated Laboratory Investigations of the Application of Air Blast (in the Production) of Niobium Pig Iron, p. 35. Titan i yego splavy. vyp. II: Metallurgiya titana (Titanium and Its Alloys. No. 2: Metallurgy of Titanium) Moscow, Izd-vo AN SSSR, 1959. 179 p.

This collection of papers deals with sources of titanium; production of titanium dioxide, metallic titanium, and titanium sheet; slag composition; determination of titanium content in slags; and other related matters. The sources of titanium discussed are the complex sillimanite ores of the Kyakhtinskoye Deposit (Buryatskaya ASSR) and certain aluminum ores of Eastern Siberia. One paper explains the advantages of using ilmenite titanium slags for the production of titanium dioxide by the sulfuric acid method. Production of metallic titanium by thermal reduction processes (hydrogen, magnesium, and carbon reduction) is the subject of several papers, while other papers are concerned with the electrolytic production of titanium. Other subjects dealt with are interaction of titanium with water vapor and with hydrogen and the determination of titanium in slags.

BARDIN, I.P., akademik; REZNICHENKO, V.A.; SIDORENKO, G.D.; REVEBTSOV,
V.P.; LUPEYKO, V.M.

Results of enlarged laboratory investigations on the converter
blowing of niobium pig iron. Titan i ego splavy no.2:35-39
'59. (MIRA 13:6)

1. Institut metallurgii AN SSSR i Institut metallurgii Ural'-
skogo filiala AN SSSR.

(Bessemer process) (Niobium)

VATOLIN, N.A.; REVEBTISOV, V.P.

Hydrogen and nitrogen in titanium wire. Trudy Inst.met.UFAN
SSSR no.3:103-110 '59. (MIRA 13:4)
(Titanium--Metallurgy) (Gases in metals)

DUKHNEVICH, Vadim Ignat'yevich; ISKHAKOV, Ganim Khanipovich; PANFILOV, Mikhail Ivanovich; REVEBTSOV, Vasil'y Petrovich; GAL'PERIN, A.S., inzh., retsenzent; VESKLOV, N.G., dotsent, kand.ekonom.nauk, red.; SYRCHINA, M.M., red.izd-va; MATLYUK, R.M., tekhn.red.

[Economic aspects and the organization of open-hearth furnace repairs] Voprosy ekonomiki i organizatsii remontov martenovskikh pechei. Sverdlovsk, Gos.nauchno-tekhn.izd-vo lit-ry po chernoi i tsvetnoi metallurgii, Sverdlovskoe otd-nie, 1960. 95 p.

(MIRA 13:9)

(Open-hearth furnaces---Maintenance and repair)

REVEBTISOV, V.P.; MIKHAYLIKOV, S.V.; KAMYSHEV, V.M.

Oxygen blowing of low-phosphorus cast iron in a one-ton rotary furnace. Izv.vys.ucheb.zav.; chern.met. no.7:42-48 '60.
(MIRA 13:8)

1. Institut metallurgii Ural'skogo filiala AN SSSR.
(Rotary-hearth furnaces) (Oxygen--Industrial application)

S/148/60/000/009/004/025
A161/A030

AUTHORS: Mikhaylikov, S.V., and Revebtsov, V.P.

TITLE: The behaviour of vanadium in blasting with different intensity of oxidation and metal temperature

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy. Chernaya metallurgiya, no. 9, 1960, 29-34

TEXT: The best method of producing steel from vanadium which contains pig iron, from the economical point of view, is blasting in converters and obtaining a semi-product for open-hearth furnaces and slag for production of ferrovanadium. Many aspects of the behaviour of vanadium in converter process have been considered, but additional investigations are important in view of the vanadium content in the ore of Kachkanar deposit that will soon be used, and the new processes must be considered (converter process with oxygen blast from top, Kaldo process, rotary process). The basic part of investigation has been carried out in the laboratory, in a 30 kw induction furnace, with 4 kg charge of synthetic preliminarily melted vanadium cast iron, in temperatures up to 1780°C. Most of the heats had initial iron

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The behaviour of vanadium ...

S/148/60/000/009/004/025
A161/A030

temperatures of 1400 to 1500°C. It had been revealed in many studies and confirmed in practice that oxidation of vanadium is intensive in the first minutes of blasting at a low initial temperature of iron and low process temperature, but with a higher initial temperature (1450-1500°C) the reaction is inhibited. The cause is not the metal temperature but the intensity of blasting (Fig.1), and oxygen has a stronger effect than air. Besides this, pure oxygen has a stronger effect than an equivalent oxygen volume in blast with air. The effect of blast intensity in an acid furnace is drastic (Fig.4); in experiments with air blast with 50-56 liter/min air the residual vanadium content was drastically decreased, and the volume of oxygen proved sufficient for oxidation of the silicon as well. The vanadium distribution curve at an air blast of 50 liter/min shows that the major factor preventing the oxydation of vanadium in the acid furnace is the higher silicon content in metal that increases during the heat with a low feed of oxygen. As soon as oxidization became intensive and silicon could burn, vanadium started oxidizing with a rate not lower than that in the basic furnace. The results of experiments match the results of industry heats in converters with a bottom and side blast. Experiments with a 20 kg arc furnace also

Card 2/6

The behaviour of vanadium ...

S/148/60/000/009/004/025
A161/A030

confirmed the observations. It may be stated that vanadium can be extracted into slag rapidly and completely through intensive interaction of metal with slag and strongly oxidizing gas. This assumption proved right in experiments with a 1 ton rotary furnace (Detailed information on these experiments with a rotary furnace will be published later). Silicon, manganese, vanadium and chrome burned out down to hundredths of one per cent still having a high carbon content; vanadium oxidized fairly fully despite temperature higher than optimum for devanadation in the second heat half; the decarbonization reaction was also intense. Experiments in industry furnaces are yet necessary. Conversion of vanadium pig iron in rotary furnaces directly into steel, or into a low-carbon semi-product with slag suitable for chemical conversion could be tried. The following basic conclusions can be made: 1) The intensity of blast is the determining factor in the behaviour of vanadium; 2) The devanadation process at high temperatures is possible when the air blast is replaced by oxygen; 3) Devanadation progresses well in rotary furnaces with oxygen blast. There are 4 figures and 6 Soviet-bloc references.

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The behaviour of vanadium ...

S/148/60/000/009/004/025
A161/A030

ASSOCIATION: Institut metallurgii Ural'skogo filiala AN SSSR (Institute
of Metallurgy of the Ural Branch of the Academy of Sciences
of the USSR)

SUBMITTED: 19 March 1960

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S/148/60/000/009/004/025
A161/A030

The behaviour of vanadium ...

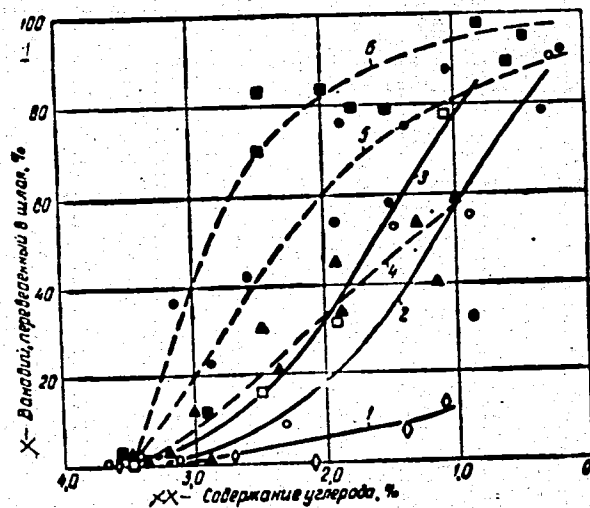


Fig. 1 - The effect of blast volume on oxidization of vanadium in basic furnace; (—) - air; (-----) - oxygen. 1) 4-6.5 liter/min; 2) 29-35 liter/min; 3) 48 liter/min; 4) 4-4.35 liter/min; 5) 8.9 - 9.3 liter/min; 6) 11.2 - 34.7 liter/min; x - % vanadium brought into slag; xx - carbon content, %

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The behaviour of vanadium ...

S/148/60/000/009/004/025
A161/A030

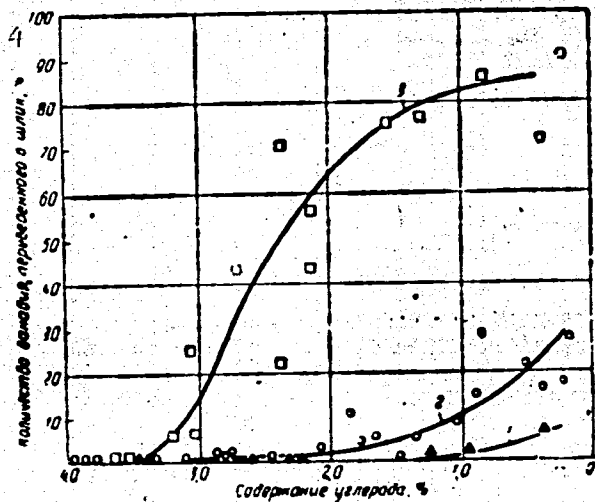


Fig. 4 - The effect of blast volume on oxidization of vanadium with an air blast in the acid furnaces:
1) 7.2 - 7.3 liter/min;
2) 30 - 42 liter/min;
3) 50.2 - 56.4 liter/min

Card 6/6

SHURYGIN, P.M.; BORONENKOV, V.N.; KRYUK, V.I.; REVEBTSOV, V.V.

Kinetics of the direct reduction of iron oxides from melts.

Izv. vys. ucheb. zav.; Chern. met. 8 no.2:23-27 '65.

(MIRA 18:2)

1. Ural'skiy politekhnicheskii institut.

GAVRILENKO, Yu.P.; CHEREDNICHENKO, Yu.N.; ULIZ'KO, I.S.; Prinimali uchastiye:
FAL'KEVICH, E.S.; YEGOROV, A.V.; NEKHOTSA, V.A.; REVEKKO, L.Ya.;
VASIL'YEV, Yu.B.; MAKSIMOV, V.M.; RAYTSIN, M.A.

Obtaining intricate, thin-walled titanium parts by casting in shell
molds. Titan i ego splavy no.9:270-273 '63. (MIRA 16:9)
(Titanium founding)
(Shell molding (Founding))

REZNIKOV, I.A.; BOGODULINA, R.I.; SOVAKOVA, T.M.

Determining the molecular masses of mixture components using Martin's
balance. Neftekhimiya 4 no.5:804-810 S-O '64.

(MIRA 18:1)

ACCESSION NR: AP4044555

S/0204/64/004/004/0624/0633

AUTHOR: Revel'skiy, I. A., Borodulina, R. I., Khokhlova, T.D.

TITLE: Continuous determination of the H/C ratio in the molecules of components of hydrocarbon mixtures and other organic compounds

SOURCE: Neftekhimiya, v. 4, no. 4, 1964, 624-633

TOPIC TAGS: hydrogen, carbon, hydrocarbon, gas chromatography, molecular weight, quantitative analysis, elemental analysis

ABSTRACT: A continuous method is described for determining the elemental composition, molecular weight and functional groups of the components of hydrocarbon mixtures, separated by gas chromatography. Chromatograms are given for mixtures of ethylene, propylene and isobutene, before and after combustion, at 40C and a nitrogen flow rate of 25 ml/min. The experimental apparatus and procedure are described in detail. The ratio of the number of hydrogen atoms to the number of carbon atoms (m/n) in the molecule of each hydrocarbon component was calculated on the basis of the areas of the CO₂ and H₂ peaks after preliminary calibration. Hydrocarbons of at least 98% purity were used, and the tabulated data show an accuracy of 2-6%. It was also found that the m/n value

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ACCESSION NR: AP4044555

does not depend on the volume of the analytical sample. This makes it possible to determine m/n for any component of a mixture, the concentration of which is unknown. The continuous determination of the elemental composition of the components of a hydrocarbon mixture does not require either preliminary weighing of the sample or calibration of the detector for each component. This method can therefore be used for the elemental analysis of gases and for the analysis of small amounts (tenths of mg) of low-boiling compounds present in low concentration in chromatographic mixtures. The determination of the elemental composition of the components of non-hydrocarbon mixtures is more difficult. This can be determined only if the content (%) of the component in the mixture (i.e. its weight) and the weight of the whole sample are known. Determining the weight of each component of a hydrocarbon mixture makes it possible to carry out a rapid quantitative analysis without preliminary determination of corrections for heat conductivity. Formulas are given for calculating the C and H content in the molecule of the substance in % by weight. Orig. art. has: 4 tables, 5 figures and 6 formulas.

ASSOCIATION: none**SUB CODE: OC****SUBMITTED: 27Nov63****OTHER: 037****NO REF SOV: 001****Card 2/2**

REVEBTSOV, V.P.; ABRAMOV, B.A.; TANTSYREV, V.V.; ZAYTSEVA, Ye.I.

Results of using ferromanganese and manganese-silicon from
Polunochnoye deposit ores in the production of steel. Trudy Inst.
met. UFAN SSSR no.7:183-199 '61. (MIRA 16:6)
(Manganese alloys—Testing) (Steel—Metallurgy)

VESELOV, Nikolay Grigor'yevich; REVEBTSOV, V.P., retsenzent;
SKOROBGACHEVA, A.P., red.izd-va; KOROL', V.P., tekhn.
red.

[Economics of blast furnace production] Ekonomika domennogo
proizvodstva. Moskva, Metallurgizdat, 1963. 219 p.
(MIRA 16:7)

(Iron industry)

REVEBTSOV, V.P.; ABRAMOV, B.A.; NAGOVITSYN, D.F.; LEBEDEV, A.A.;
OSIPOV, G.V.; TANTSYREV, V.V.; ISUPOV, V.F.; ZAYTSEVA, Ye.I.

Quality of manganese ferroalloys from ores of the Polunochnoye
deposit. Stal' 21 no.9:806-809 S. '61. (MIRA 14:9)

1. Institut metallurgii Ural'skogo filiala Akademii nauk;
Nizhne-Tagil'skiy metallurgicheskiy kombinat i Kombinat im.
Serova.

(Ferromanganese) (Polunochnoye region--Manganese ores)

REVEKO, G. S.

USSR/Metals
Zinc Alloys
Corrosion

Mar/Apr 1948

"Increase in the Corrosion Resistance of Zinc Plating and Zinc Alloys by Chromating,"
A. V. Turkovskaya, G. S. Reveko, Mem, Committee on Galvanostegy, 2 pp

"Vest Inzher i Tekhn" No 2

Zinc alloys or zinc coatings both increase the resistance to corrosion. Various factors, such as humidity of the atmosphere, chemical content of the air, salt water, etc., have various effects on the degree of corrosion resistance. Best results obtained from 5-second immersion in bichromate solutions. Chromating gives zinc reddish hue.

PA 65T77

REVELIS, I. L.

Blast-furnace waste-pile slag as component for cold asphalt beton. I. L. Revelis and L. A. Chernyak. *Trudy Khar'kov. Avtomobil.-Dorozn. Inst. No. 15, Sbornik Stuchesk. Nauch. Rabot* 1953, No. 8, 17-19; *Referat, Zhur., Khim.* 1954, No. 48765.—A comparison was made of the asphalt concrete properties made with slag and with granite gravel. No significant difference between the two were found. M. Hosh

(1)

REVELIS, M., inzh.-metodist; POLOZOV, V., prepodavatel'.

Training engineers and technicians at the Leningrad Metals Plant.
Sots.trud no.10:134-137 O '57. (MIRA 10:11)

1. Otdel tekhnicheskogo obucheniya Leningradskogo metallicheskogo zavoda (for Revelis). 2. Kafedra politekonomii Leningradskogo gosudarstvennogo universiteta im. Zhdanova (for Polozov).
(Leningrad--Turbines) (Technical education)

REVELOV, B. M.

Device for Stabilizing Bias Voltage of Terminal Tubes in Radio Transmitters and Audio Frequency Amplifiers, Operating in a Grid Current Regime. Patent, Class 214⁴, 351⁴. No 103176; Elektrosvyaz' No 1, Jan 57.

SHNOL', S.E.; RUDNEVA, O.A.; NIKOL'SKAYA, Ye.L.; REVEL'SKAYA, T.A.

Variation of the amplitude of spontaneous actomyosin preparation transitions from one state into another during storage. Biofizika 6 no. 2:165-171 '61. (MIRA 14:4)

1. Tsentral'nyy institut usovershenstvovaniya vrachey, Moskva. (ACTOMYOSINS)

REVEL'SKIY, Aleksandr Leonidovich, polkovnik zapasa; SINYAYEV, A.D.,
red.; CHAPAYEVA, R.I., tekhn. red.

[Radiation and chemical reconnaissance] Radiatsionnaia i khimicheskaya razvedka. Moskva, Voenizdat, 1962. 114 p.

(Atomic warfare) (Chemical warfare) (MIRA 15:8)

BORODUTINA, R. S.; NIKOLAYEV, I. A.; SHYLENKO, A. B.

Chromatographic method for determining small amounts of acetonitrile
in acrylonitrile. Plast.massy no.7:49-51 1964. (MIRA 17:10)

REVEL'SKIY, I.A.; BORODULINA, R.I.; SOVAKOVA, T.M.; KLIMOVA, V.G.

Rapid determination of the number of carbon and hydrogen atoms
in the molecules of gaseous compounds. Dokl. AN SSSR 159 no.4:
861-864 D '64 (MIRA 18:1)

1. Predstavleno akademikom M.I. Kabachnikom.

LEPIN, G.F.; VISHNEVSKIY, A.V.; LI SI-CHAN [Li Hsi-ch'ang]; BUDNEVSKIY, A.M.;
BORODULINA, R.I.; VERTEBNYY, P.Ya.; REVEL'SKIY, I.A.

Exchange of experience. Zav.lab. 28 no.6:753-755 '62. (MIRA 15:5)

1. Kramatorskiy nauchno-issledovatel'skiy i proyektno-tekhnologicheskii institut mashinostroyeniya (for Lepin, Vishnevskiy).
2. Institut metallurgii imeni A.A. Baykova (for Li Si-CHAN, Budnevskiy).

(Metallurgical analysis)

REVEL'SKIY, I.A.; BORODULINA, R.I.; KHREBLOVA, T.D.

Continuous determination of the H/C ratio in the molecules of
the components of hydrocarbon mixtures and other compounds.
Neftekhimiya 4 no.4:624-633 1964 (MIRA 10 10)

1ST AND 2ND ORDERS		PROCESSES AND PROPERTIES INDEX		3RD AND 4TH ORDERS	
CA		Contribution to the analytical determination of traces of the solvent in the separation of paraffin from the mineral oils. J. Revenda (Lab., Ref. Mineral Oils, Natl. Enterprise, Ostrava, Czechoslovakia). <i>Chem. Obzor</i> 22, 61-6 (1947).—A routine control method has been developed for detn. of traces of dichloroethane or its mist, with benzene as a solvent after sepn. of paraffin. It is based on the decrease of the flash point of the initial oil in the presence of traces of the solvent in Pensky-Marten app. with closed vessel. The effect of the decrease of flash point depends on the qualities of the solvent, on its quantity, and on the flash point of the initial oil. The decrease is 16-85° for each 0.1% by vol. of dichloroethane and 20-106° for each 0.1% by vol. of a mist. of dichloroethane and benzene (70:30 by vol.) in oils with flash point 170-290°. The possible errors are ±0.004% by vol. of solvent for oils with flash point up to 200° and ±0.0008% vol. of solvent for oils with flash point above 200° with the concn. of the solvent up to 0.2%. A table for practical use showing the dependence of flash point of oil on the sp. wt. of the solvent free from paraffin and on its concn. is given. Jan Micka		S7	
ASAC-SLA METALLURGICAL LITERATURE CLASSIFICATION					
GROUP 1		GROUP 2		GROUP 3	
GROUP 4		GROUP 5		GROUP 6	

CA

4

Polargraphic studies with the dropping-mercury electrode. I. Anodic polarization and the influence of anions. J. Revenda. *Collection Czechoslov. Chem. Commun.* 1961, 26, 451-67 (1961). Cl^- , Br^- , I^- , OH^- , S^{2-} , CN^- , CNS^- , SO_3^{2-} and SO_4^{2-} in concns. greater than 10^{-2} molar, cause depolarization when the dropping-Hg electrode is used as anode. When the anion concns. are below 10^{-2} molar, their effect on the limiting currents of the amp.-voltage curves is proportional to the concn. of the anions. The magnitude of these currents is the same as that of the limiting currents because of the electrodeposition of cations at the dropping-Hg electrode. The depolarization potentials of anions are $\text{S}^{2-} = -0.70$ v., $\text{CN}^- = -0.62$, $\text{SO}_3^{2-} = -0.20$, $\text{SO}_4^{2-} = -0.07$, $\text{OH}^- = 0.00$, $\text{Br}^- = +0.06$, $\text{CNS}^- = +0.10$ and $\text{Cl}^- = +0.17$ v., from N calomel electrode in 10^{-2} N soln. Hg was dissolved from the anode at $+0.30$ v. and greater. The effect of Cl^- , Br^- , I^- , OH^- and S^{2-} ions is due to ppt. formation with Hg^2+ . That due to CN^- , CNS^- , SO_3^{2-} and SO_4^{2-} results from the formation of complexes. If more than one of these anions are present, they cause polarographic waves on the current-voltage curve. H. E. Messmore

ATL 31.4 METALLURGICAL LITERATURE CLASSIFICATION

S/081/62/000/021/044/069
B171/B101

AUTHOR: Revenda, J.

TITLE: Effects of aromatic hydrocarbons on the quality of lubricating oils

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 21, 1962, 402, abstract 21M138 (Ropa a uhlie, v. 4, no. 2, 1962, 38-45 [Slov.; summaries in Russ., Eng., Ger., and French])

TEXT: A characteristic of the physicochemical properties of aromatic compounds contained in engine, transformer and cable oils is given. The author points out that the Czechoslovakian technical conditions and standards for lubricants disregard the chemical composition of oils and consider only certain physico-chemical constants, which do not completely represent the behavior of oils under working conditions. The necessity of change of such a situation is indicated. [Abstracter's note: Complete translation.]

Card 1/1

REVENDA, J.; LIEBL, X. - Paliva - Vol. 35, no. 2, Feb. 1955.

Utilizing waste products in the technological processing of petroleum. p. 46.

SO: Monthly list of East European Accessions, (EEAL), LC, Vol. 4, No. 9, Sept. 1955
Uncl.

Reverda, J.

13691 (The Analytical Evaluation of Acid Sludges From
Chem. Abh. 1. Beitrag zur analytischen Beurteilung von
Säureharzen aus Mineralölen. J. Reverda and V. Szybinski.
Chemische Technik, v. 6, no. 5, 1951, p. 284-287.
Marketing of possible derivatives. Table. 10 ref.

①

REV. 1/15, Jan. 1962.

Manufacturers of Lubricating Oils. Report on the
1962

1. Elmhurst National Enterprise, Research Institute of Crude
Oil and Hydrocarbon Gases.

REVERDA, Jan; BACHUROVA, Emilia; BYIAN, Jan

Contribution to the furfural and cresol selectivity. Ropa a
uhlie 6 no.12:364-375 D '64.

S/081/62/000/005/074/112
3160/3138

AUTHOR: Revenda, Jan

TITLE: Better technology and economics for the process of refining mineral oils with cresol. II

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 5, 1962, 523, abstract 5M162 (Ropa a uhlie, v. 3, no. 6, 1961, 164 - 169)

TEXT: On the basis of an analysis of the equilibrium relationships of multi-component cresol and mineral oil extraction systems it is shown that the amount of water in the cresol is the most important technological and economic factor in the process of refining the oils. As the water saturation of the cresol increases, so does its selectivity increase and its solvent ability decrease. This causes an increase in the output of refined product; the critical solution temperature and the solvent-to-oil ratio rise, and the ability to form an emulsion decreases. The optimum water saturation of the cresol depends on the nature of the oil, and the extraction temperature t_e . For type 434 medium oils with good solubility in cresol and $t_e \sim 40^\circ$ the optimum water content in the cresol is 11 % by Card 1/2

Better technology and economics ...

S/061/62/000/005/074/112
B160/B138

weight; maximum selectivity is achieved at this value and water is not forced out of the cresol. For type 460 oils with poor solubility in cresol and $t_e \sim 50 - 70^\circ$ the optimum water content in the cresol is 7 - 8 % by weight, and 8 - 10 % by weight for type 453 heavy oils with $t_e = 40 - 50^\circ$.

Under these refining conditions it is suggested that a rotary disc column should be used instead of the present unwieldy and unproductive equipment. It was found that the power and specific load of this column can be controlled in dependence on the r.p.m. of the rotor. For basic oils the optimum specific load is 25 - 30 l/dm²/hr with 0.8 - 1.2 theoretical extraction stages. When the suggested conditions were applied with a rotary disc column the output of refined oil rose by 6 - 10 % by weight, the cost price was reduced by 58 - 91 Czechoslovakian crowns per ton product, and the consumption of electric power was reduced by 20 - 30 kWh per ton raw material. For Part I see RZhKhim, 1961, abstract 20M117. [Abstracter's note: Complete translation.]

Card 2/2

Z/011/62/019/007/001/005
E073/E435

AUTHOR: Revenda, Y.

TITLE: Influence of aromatic hydrocarbons in lubricating oils
on their quality

PERIODICAL: Chemie a chemická technologie. Přehled technické a
hospodarské literatury, v.19, no.7, 1962, 315,
abstract Ch 62-4308. (Ropa a Uhlí, v.4, no.2, 1962,
38-44)

TEXT: The influence of the physical and chemical properties of
aromatics in oils on their service performance and the problem of
technological treatment for conserving the required aromatics in
oils are dealt with. Evaluations and tests will have to be
reorientated from physical and chemical constants to the chemical
composition. 22 tables, 9 literature references. ✓

[Abstracter's note: Complete translation.]

Card 1/1

REVENDA, Jan

Efficiency of the Reonyl 1500 pour-point depressor. Ropa a uhlie
7 no.4:102-103 Ap '65.

1. Research Institute of Petroleum and Hydrocarbon Gases of
the Slovnaft National Enterprise, Bratislava.

USSR/ Miscellaneous

Card 1/1 :Pub. 89 - 19/28

Authors :Rodionov, S. and Revenkov, A.

Title :Exchange of experiences

Periodical :Radio 1, page 42, Jan 1954

Abstract :Two individual articles are presented under the above title. One deals with photo-printing on metals, and the other with the replacement of 30PIM tubes in AR3-49 radio receivers by beam tetrodes.

Institution:

Submitted:

REVENKOV, A. (Tallinn)

Replacing tube 30PIM in a ABZ-49 receiver. Radio no. 1:42 Ja '54.
(MLBA 7:1)
(Vacuum tubes)

REVENKO, A. D.

Cand Tech Sci - (diss) "Statistical study of the wear of engines and the determination of characteristics for designing parts having wear-resistance." Kiev, 1961. 22 pp; (Main Board of Civil Air Fleet under the Council of Ministers USSR, Kiev Inst of Civil Air Fleet); 180 copies; free; (KL, 6-61 sup, 224)

117

The optical variability of the blood. M. A. Piguzev, A. B. Pavlovich and L. K. Kuvshinskii. *Klin. Med.* (U. S. S. R.) 18, 411-15 (1937); *Chem. Zentr.* 1938, 1, 301A. The absorption of the blood of healthy individuals was detd. with the use of a spectrometer under different conditions (light, air, heat). Under the action of light at 16-18° the absorption of the blood changed only after 5-6 days.

M. G. Moore

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION
SIGN: 574312A
L47007 41

SECOND - 17 ONE ONE
ELLISTONE
CERN: 536170
ELLISTONE ONE ONE ONE

REVENUE, A. P.

Nevenko, A. P. "The system of steel cementation with Saratov natural methane gas",
Sbornik sobr. dokladov Srats. gos. nauch.-tekhn. konf-tsi predpriyatiy mashinostroit.
i metalloobrab. prom. (Saratov, 1965), No. 1, p. 10. (Ukrainian)

SO: U3211, 10 April 53, (Letopis 'Zhurnal 'nykh Statey, No. 11, 1949).

REVENKO, G.P., meditsinskaya sestra; SHARPAN', A.S., kand.med.nauk (Moskva);
NOVIKOV, I.M. (Stalino)

Nurses' councils. Med.sestra 18 no.10:46-48 0 '59. (MIRA 13:1)
(NURSES AND NURSING)

REVENKO, I., michman

Do you know? Be able also to explain! Starsh.-serzh. no.8:10
Ag '61. (MIRA 14:10)

(Naval education)

REVENKO, I.F.; KONOVALOV, I.M., kalibrovshchik

Improved grooving of strand mills. Metallurg 3 no.6:23-25
Je '58. (MIRA 12:1)

1. Nachal'nik sortoprokatnogo tsekha Stalinskogo metallurgicheskogo
zavoda (for Revenko). 2. Sortoprokatnyy tsekh Stalinskogo metallurgi-
cheskogo zavoda (for Konovalov).
(Rolling mills)

ETIGIN, M.G.; REVENKO, I.F.

Economic work at the Donotek and the Makeevka metallurgical
plants. Metallurg 10 no.12:39-40 D '65.

(MIRA 18:12)

YEKTOV, I.M.; ZARUYEV, V.M.; GUROV, S.A.; REVENKO, I.F.; V rabote
prinimali uchastiye : KALMANOVICH, Yu.R.; GRIGOR'YEV, F.N.;
KOSHLENKO, A.M.; LITVINENKO, Yu.P.; DMITRIYEV, V.D.;
POLYAKOV, V.V.; PETUSHKOV, Ye.S.; FIRSOV, P.V.

Rolling double bulb-bar shapes with longitudinal cutting in
the finishing mill. Stal' 20 no. 12:1113-1115 D '60.
(MIRA 13:12)

1. Stalinskiy metallurgicheskiy zavod i Donetskii politekhnicheskii institut.

(Rolling (Metalwork))

SOV/130-58-6-10/20

AUTHORS: Revenko, I.F. and Konovalov, I.M.

TITLE: Improving Roll-pass Design of Section Mills (Usover-shenstvovaniye kalibrovok sortovykh stanov)

PERIODICAL: Metallurg, 1958, Nr 6, pp 23 - 25 (USSR)

ABSTRACT: At the Staling Metallurgical Works, a re-examination has been made of roll-pass design for rolling a number of profiles on all rolling mills. The authors describe some of the changes, which aimed at reducing the labour of the operators, improving product quality and making load distribution over the working stands more uniform. They first deal with the 400 mill, which is in two lines with 550-mm dia. rolls in the reducing stand and with 400-mm dia. rolls in the three-stand finishing train. The new (1957) GOST for spring steel with its reduced tolerances made it necessary to abandon the former scheme (Figure 1a) in favour of one (Figure 1b) in which the 107X55 mm product of the reducing stand is rolled with the same number of passes but involving edge passes. This mill rolls spring strip from 55S2 and 60S2 steels; its productivity is said to have been unchanged through the adoption of the new scheme. The authors next consider the 350-mill with a reducing stand with 500 mm dia. rolls and a four-stand finishing train. Here

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Improving Roll-pass Design of Section Mills

SOV/130-58-6-10/20

two passes have been eliminated (Figure 2) in rolling Nr 24 hexagonal bars enabling rolling to be completed at a higher temperature. For rolling 22-mm squares, the system has been changed (Figure 3) from diamond-square to diamond-diamond, reducing the number of passes from seven to five. ▲ similar type of change was made for rolling 26- and 27-mm dia. rounds and 21 x 26, 30 x 16, 30 x 18 and 35 x 18 strip. Mill productivity rose by 15-18% for the hexagonal and square and by 10-15% for the rounds. Finally, the authors describe roll-pass design changes on the 250 mill, which is in three lines: the reducing stand has 500-mm dia. rolls, the middle line has two stands with 350 mm dia. rolls and the finishing line has five stands. The roll-pass design is such that all passes in the reducing and middle lines are constant for all profiles. The rolling of 8 x 16 mm strip of 55S2 steel has been adopted at the mill with a square, diamond, diamond, square with concave

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SOV/130-58-6-10/20

Improving Roll-pass Design of Section Mills

faces and smooth barrel as the successive passes (Figure 4) giving successful results.

There are 4 figures.

ASSOCIATION: Stalinskiy metallurgicheskiy zavod
(Stalino: Metallurgical Works)

Card 3/3

1. Rolling mills - Performance
2. Rolling mills - Design
3. Rolling mills - Production

SOV/137-57-11-21300

Translation from: Referativnyy zhurnal, Metallurgiya, 1957, Nr 11, p 96 (USSR)

AUTHOR: Revenko, I.F.

TITLE: The Work of the Stalino Metallurgical Plant on the Rolling of Economical Shapes, and Certain Problems of Organization Related to the Development of That Work (O rabote Stalinskogo metallurgicheskogo zavoda po prokatke ekonomichnykh profiley i o nekotorykh organizatsionnykh voprosakh, svyazannykh s ikh osvoyeniyem)

PERIODICAL: V sb.: Ratsionalizatsiya profiley prokata. Moscow, Profizdat, 1956, pp 389-391

ABSTRACT: Problems dealing with the work of the section-rolling mill at the plant are discussed.

P.N.

Card 1/1